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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BAUM, RONALD

ART UNIT PAPER NUMBER

2136

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/055,803	LI, WEIPING	
	Examiner	Art Unit	
	Ronald Baum	2136	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____. |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-20 are pending for examination.

2. Claims 1-20 are rejected.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Radha et al, U.S. Patent 6,501,397 B1.

5. As per claim 1; "For use in conjunction with a video encoding/decoding technique wherein images are encoded using truncatable image-representable signals in bit plane form, the method comprising the steps of:

selecting a number of bitplanes to be used in a prediction loop [ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... selecting ... bitplanes ... prediction loop ...’]; and

producing an alignment parameter in a syntax portion of an encoded bitstream that determines

the alignment of bitplanes with respect to the prediction loop [ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, as broadly interpreted by the examiner would clearly encompass ‘... alignment parameter ... syntax portion ... bitstream ... respect ... prediction loop’].”.

6. Claim 2 *additionally recites* the limitation that; “The method as defined by claim 1, wherein said alignment is

a variable parameter.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, as broadly interpreted by the examiner would clearly encompass ‘... alignment ... variable ... parameter’.).

7. Claim 3 *additionally recites* the limitation that; “The method as defined by claim 1, further comprising

the step of providing a decoder for decoding said encoded bitstream.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... encoded bitstream’.).

8. Claim 4 *additionally recites* the limitation that; “The method as defined by claim 3, wherein said step of providing a decoder includes

providing a decoder that is operative in response to said alignment parameter to
align decoded bit planes with respect to a prediction loop.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... alignment parameter ... align ... prediction loop’.).

9. Claim 5 *additionally recites* the limitation that; “The method as defined by claim 1, wherein said encoding/decoding technique comprises

a fine granularity scaling encoding/decoding technique.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the FGS aspects of grouping of bit planes prior to coding

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via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... fine granularity scaling’.).

10. Claim 6 *additionally recites* the limitation that; “The method as defined by claim 5, wherein said fine granularity scaling encoding/decoding technique is

MPFG-4 fine granularity scaling.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, col. 2, lines 20-53, whereas the MPEG –x coding applications FGS aspects of grouping of bit planes prior to said coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... MPFG-4 fine granularity scaling’.).

11. Claim 7 *additionally recites* the limitation that; “The method as defined by claim 6, further comprising

repeating said selecting and producing steps for

a number of frames of a video signal.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, col. 2, lines 20-53, whereas the MPEG –x coding applications FGS aspects of grouping of bit planes prior to said coding via a deterministic process, for multiple frames/ video streams so encoded, as broadly interpreted by the examiner would clearly encompass ‘... repeating ... selecting and producing ... frames of a video signal’.).

12. As per claim 8; “For use in conjunction with a video encoding/decoding technique wherein image frames are encoded using truncatable image-representable signals in bit plane form, and subsequently decoded with a decoder, a method comprising the steps of:

selecting a number of bitplanes to be used in a prediction loop [ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... selecting ... bitplanes ... prediction loop ...’]; and

producing an encoded bitstream for each frame that includes

an alignment parameter which determines

the alignment of bitplanes with respect to the prediction loop

[ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... encoder ... alignment parameter ... alignment of bitplanes ... prediction loop’..”].

13. Claim 9 *additionally recites* the limitation that; “The method as defined by claim 8, wherein said frames are frames of macroblocks, and wherein said step of producing an alignment parameter includes producing an alignment parameter for said macroblocks.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, col. 2, lines 20-53, whereas the partitioning and sub-signal processing aspects of grouping of bit planes prior to said coding via a deterministic process, for

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multiple frames/ video streams so encoded, as broadly interpreted by the examiner would clearly encompass ‘...macroblocks ... alignment parameter ...’.).

14. Claim 10 ***additionally recites*** the limitation that; “The method as defined by claim 9, wherein said alignment parameters are
variable parameters.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, as broadly interpreted by the examiner would clearly encompass ‘... alignment ... variable ... parameter’.).

15. Claim 11 ***additionally recites*** the limitation that; “The method as defined by claim 10, wherein said alignment parameters are
in the syntax portions of said encoded bitstreams.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, as broadly interpreted by the examiner would clearly encompass ‘... alignment parameter ... syntax portion ... bitstream’.).

16. Claim 12 ***additionally recites*** the limitation that; “The method as defined by claim 8, further comprising the step of
providing a decoder for decoding said encoded bitstream.”.

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The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... encoded bitstream’.).

17. Claim 13 *additionally recites* the limitation that; “The method as defined by claim 11, further comprising the step of

providing a decoder for decoding said encoded bitstream.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... encoded bitstream’.).

18. Claim 14 *additionally recites* the limitation that; “The method as defined by claim 12, wherein said step of providing a decoder includes

providing a decoder that is operative in response to said alignment parameter to align decoded bit planes with respect to a prediction loop.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... alignment parameter ... align ... prediction loop’.).

19. Claim 15 *additionally recites* the limitation that; “The method as defined by claim 13, wherein said step of providing a decoder includes

providing a decoder that is operative in response to said alignment parameter to

align decoded bit planes with respect to a prediction loop.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... decoder ... alignment parameter ... align ... prediction loop’.).

20. Claim 16 *additionally recites* the limitation that; “The method as defined by claim 14, wherein said encoding/decoding technique comprises

a fine granularity scaling encoding/decoding technique.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the FGS aspects of grouping of bit planes prior to coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... fine granularity scaling’.).

21. Claim 17 *additionally recites* the limitation that; “The method as defined by claim 15, wherein said encoding/decoding technique comprises

a fine granularity scaling encoding/decoding technique.”.

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The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, whereas the FGS aspects of grouping of bit planes prior to coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... fine granularity scaling’.).

22. Claim 18 *additionally recites* the limitation that; “The method as defined by claim 16, wherein said fine granularity scaling encoding/decoding technique is

MPFG-4 fine granularity scaling.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, col. 2, lines 20-53, whereas the MPEG –x coding applications FGS aspects of grouping of bit planes prior to said coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... MPFG-4 fine granularity scaling’.).

23. Claim 19 *additionally recites* the limitation that; “The method as defined by claim 17, wherein said fine granularity scaling encoding/decoding technique is

MPFG-4 fine granularity scaling.”.

The teachings of Radha et al are directed towards such limitations (i.e., ABSTRACT, figures 1-4 and associated descriptions, col. 2, lines 20-53, whereas the MPEG –x coding applications FGS aspects of grouping of bit planes prior to said coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... MPFG-4 fine granularity scaling’.).

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24. As per claim 20; “For use in conjunction with a video encoding/decoding technique wherein image frames are encoded using truncatable image-representable signals in bit plane form, and subsequently decoded with a decoder, an apparatus comprising:

means for selecting a number of bitplanes to be used in a prediction loop [ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, as broadly interpreted by the examiner would clearly encompass ‘... selecting ... bitplanes ... prediction loop ...’]; and

means for producing an encoded bitstream for each frame that includes

an alignment parameter which determines

the alignment of bitplanes with respect to the prediction loop

[ABSTRACT, figures 1-4 and associated descriptions, whereas the grouping of bit planes prior to coding via a deterministic process, clearly specified as a parameter, and subsequent associated decoding aspects, as broadly interpreted by the examiner would clearly encompass ‘... encoder ... alignment parameter ... alignment of bitplanes ... prediction loop’..”].”.

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Conclusion

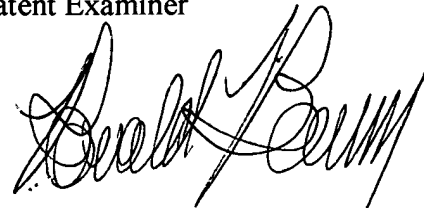
25. Any inquiry concerning this communication or earlier communications from examiner should be directed to Ronald Baum, whose telephone number is (571) 272-3861, and whose unofficial Fax number is (571) 273-3861. The examiner can normally be reached Monday through Thursday from 8:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh, can be reached at (571) 272-3795. The Fax number for the organization where this application is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. For more information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ronald Baum

Patent Examiner



CEL

Primary Examiner

AU 2131

12/18/05